

# ENERGY MATTERS

Facts & Tips from the U.S. Department of Energy

## Harvesting A Natural Resource: Wind Power

(NAPS)—In today's economy, with America's increasing consumption of electricity and natural resources, the possibility of an inexpensive, renewable and reliable energy source is seen by consumers as a breath of fresh air. That's where wind energy comes in.

According to the Department of Energy, modern wind turbines can convert winds in most U.S. states and coastal waters into reliable, clean electricity. While wind today provides only a small percentage of our national electricity needs, it is an immense homeland energy resource and is the fastest-growing energy supply technology.

The United States has an abundance of potentially viable wind resources—onshore and offshore—estimated at over 2,000 gigawatts (GW). To put this into perspective, 350 GW of installed wind capacity would represent about 20 percent of our nation's current electricity demand. This is similar to the level of electricity produced from the nation's nuclear or natural gas-fired generation today.

Today, the nation's "wind farms" generate over 9,000 megawatts of electricity—enough electricity to serve more than two million households. Smaller wind systems are being used to generate on-site power and provide additional power to local utilities, and the market is expanding at over 20 percent annually. However, wind power represents more than just competitive electricity. It offers:

- rural economic benefits from project development;
- a hedge against volatile natural gas prices and planned use of imported liquid natural gas;



**Wind power is compatible with rural land uses. Crops can be grown and livestock can be grazed right under the turbines.**

- cost-effective clean air compliance option for businesses and communities;
- strong potential partner for other domestic power industries including coal and nuclear; and
- a renewable option for producing hydrogen for transportation fuels.

Wind energy is a homegrown energy source that contributes to national security by reducing America's dependence on oil and natural gas—most of which are imported from other countries. In addition, unlike most other electricity sources, wind turbines don't consume water. For instance, irrigation and thermal electric generation use 77 percent of all fresh water in the U.S.; wind turbines, on the other hand, don't use water at all. That makes wind energy a great choice for drought-stricken communities in rural America.

To learn more about the benefits of wind energy, call (877) EERE-INF or visit the Web site at [www.eere.energy.gov](http://www.eere.energy.gov).